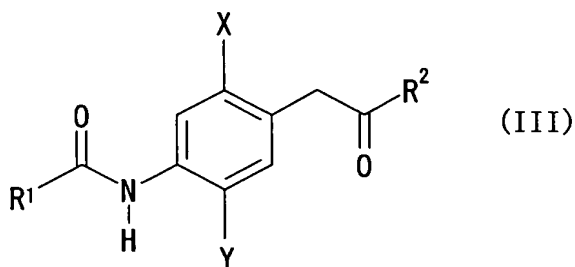


## Claims

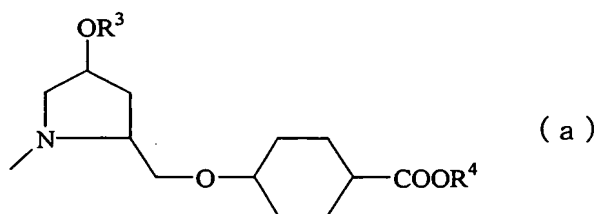
1. A process for producing a compound represented by formula (III):

[F4]



(wherein R<sup>1</sup> represents an aryl group which may be substituted, or a heteroaryl group which may be substituted; R<sup>2</sup> represents a linear or branched lower alkoxy group which may be substituted, an aralkyloxy group which may be substituted, a phenoxy group, or a group represented by formula (a):

[F3]



(wherein R<sup>3</sup> represents a linear or branched lower alkyl group which may be substituted; and R<sup>4</sup> represents a linear or branched lower alkyl group which may be substituted, or an aralkyl group which may be substituted); X represents a hydrogen atom or a halogen atom; and Y represents a halogen

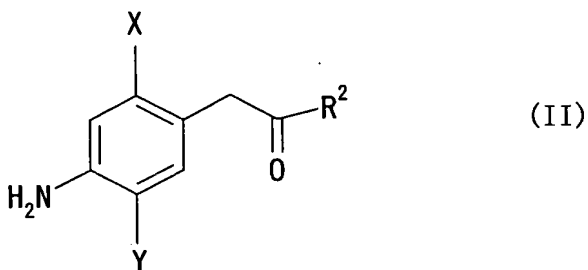
atom or a lower alkoxy group), characterized by comprising reacting a compound represented by formula (I):

[F1]



(wherein R¹ has the same meaning as defined above) with a chlorinating agent and a compound represented by formula (II):

[F2]



(wherein R² has the same meaning as defined above) or a salt thereof under acidic conditions without addition of a base.

2. The process according to claim 1, wherein R¹ represents a 1-methylindolyl group.

3. The process according to claim 1 or 2, wherein the chlorinating agent is oxalyl chloride or thionyl chloride.

4. The process according to any one of claims 1 to 3, wherein R² represents a linear or branched lower alkoxy group.

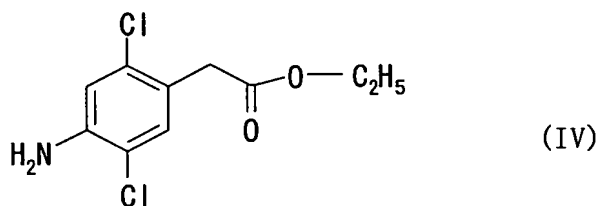
5. The process according to any one of claims 1 to 3, wherein R² represents a group represented by formula (a) wherein R³ represents a methyl group, and R⁴ represents a linear or branched lower alkyl group.

6. The process according to any one of claims 1 to 5, wherein X represents a chlorine atom or fluorine atom.

7. The process according to any one of claims 1 to 6, wherein X represents a chlorine atom, Y represents a chlorine atom, and R<sup>1</sup> represents a 1-methylindolyl group.

8. A hydrochloric acid salt of a compound represented by formula (IV).

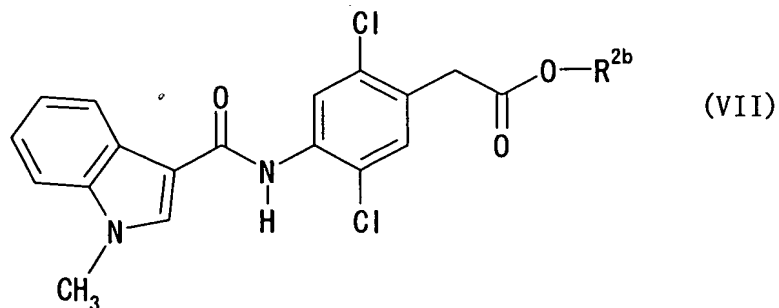
[F5]



9. The process according to any one of claims 1 to 7, wherein the compound represented by formula (II) or a salt thereof is a hydrochloric acid salt as recited in claim 8.

10. A process for producing a compound represented by formula (VII):

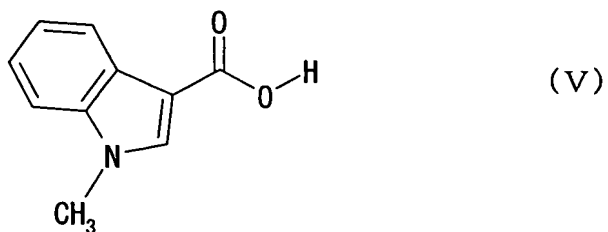
[F8]



(wherein R<sup>2b</sup> represents a linear or branched lower alkyl

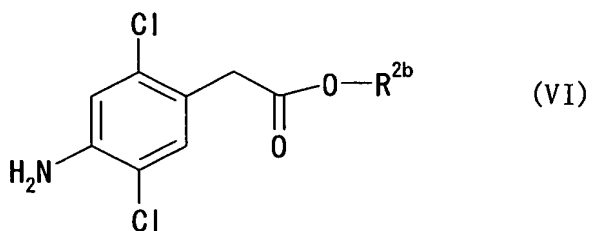
group which may be substituted, an aralkyl group which may be substituted, or a phenyl group), characterized by comprising reacting a compound represented by formula (V):

[F6]



with a chlorinating agent and a compound represented by formula (VI):

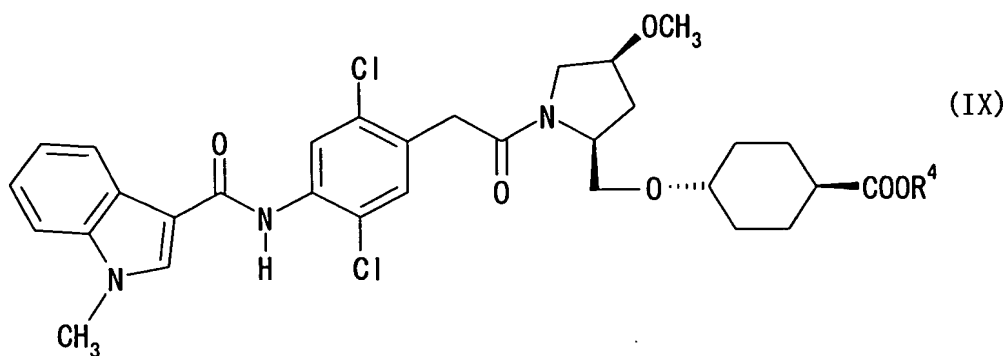
[F7]



(wherein  $R^{2b}$  has the same meaning as defined above) or a salt thereof under acidic conditions without addition of a base.

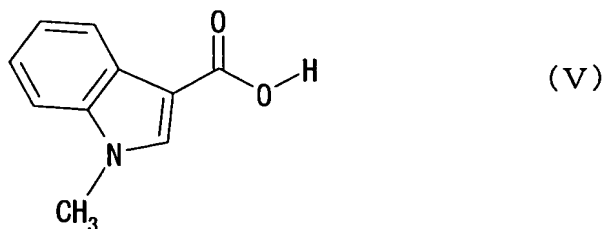
11. A process for producing a compound represented by formula (IX):

[F11]



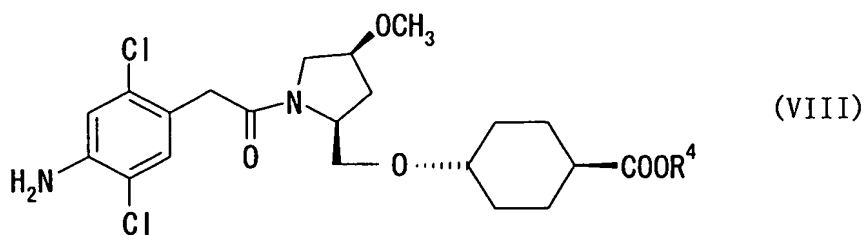
(wherein R<sup>4</sup> represents a linear or branched lower alkyl group which may be substituted, or an aralkyl group which may be substituted), characterized by comprising reacting a compound represented by formula (V):

[F9]



with a chlorinating agent and a compound represented by formula (VIII):

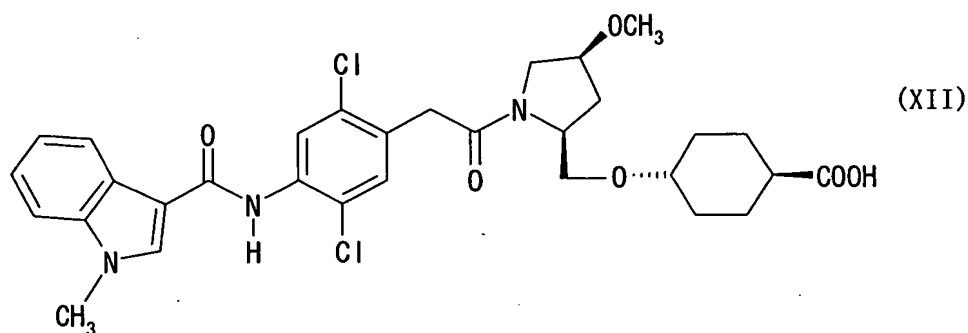
[F10]



(wherein R<sup>4</sup> has the same meaning as defined above) or a salt thereof under acidic conditions without addition of a base.

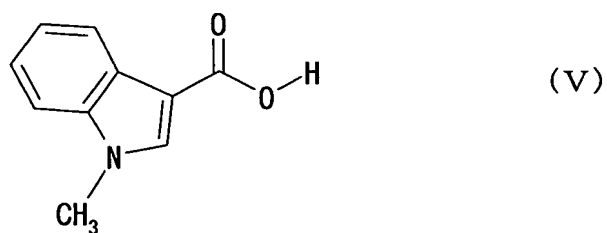
12. A process for producing a compound represented by formula (XII):

[F16]



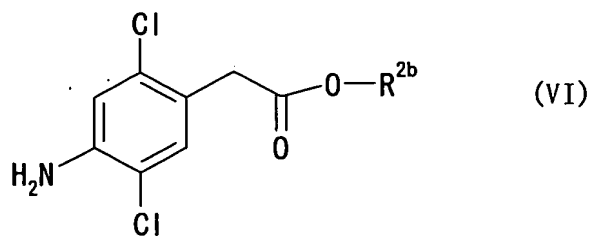
or a salt thereof, or a hydrate of the compound or the salt, characterized by comprising reacting a compound represented by formula (V):

[F12]



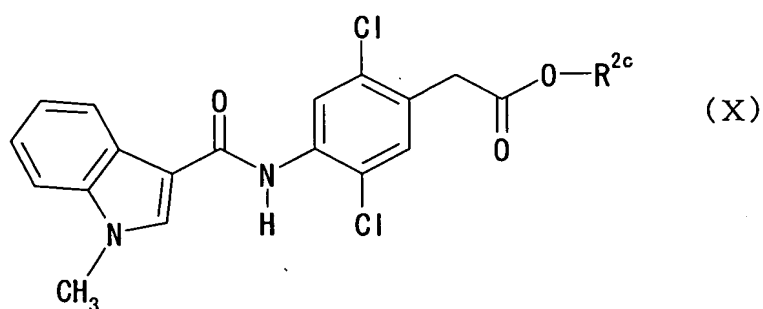
with a chlorinating agent and a compound represented by formula (VI):

[F13]



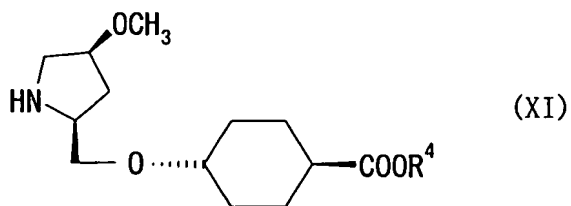
(wherein  $R^{2b}$  represents a linear or branched lower alkyl group which may be substituted, or an aralkyl group which may be substituted, or a phenyl group) or a salt thereof under acidic conditions without addition of a base; optionally hydrolyzing the product to thereby yield a compound represented by formula (X):

[F14]



(wherein  $R^{2c}$  represents a hydrogen atom, a linear or branched lower alkyl group which may be substituted, an aralkyl group which may be substituted, or a phenyl group); reacting the compound represented by formula (X) with a compound represented by formula (XI):

[F15]

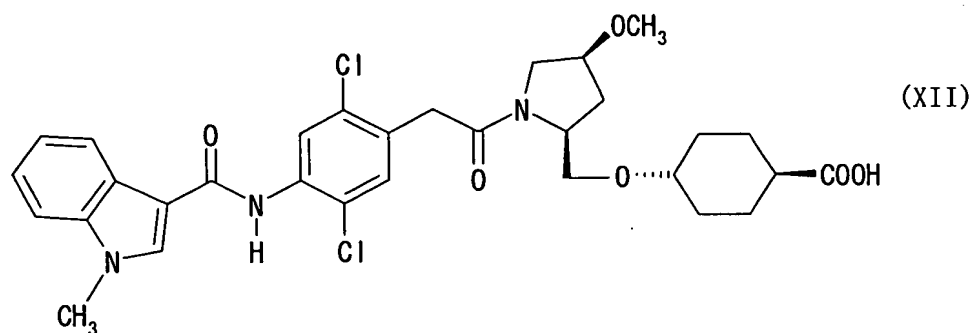


(wherein  $R^4$  represents a linear or branched lower alkyl group which may be substituted, or an aralkyl group which may be

substituted); and hydrolyzing the product.

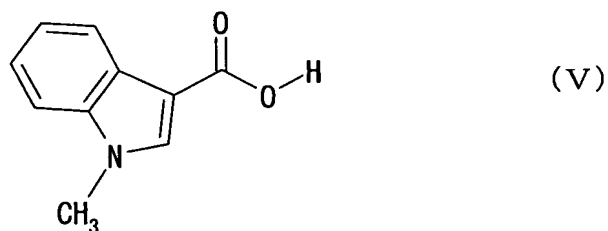
13. A process for producing a compound represented by formula (XII):

[F19]



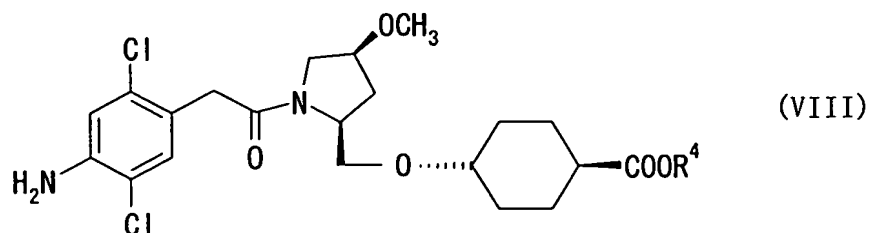
or a salt thereof, or a hydrate of the compound or the salt, characterized by comprising reacting a compound represented by formula (V):

[F17]



with a chlorinating agent and a compound represented by formula (VIII):

[F18]

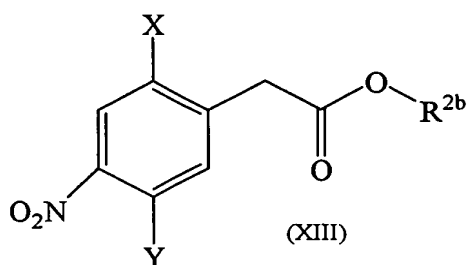




(wherein  $R^4$  represents a linear or branched lower alkyl group which may be substituted, or an aralkyl group which may be substituted) or a salt thereof under acidic conditions without addition of a base; and hydrolyzing the product.

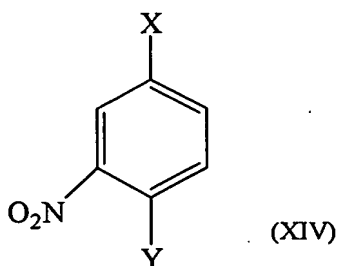
14. A process for producing a compound represented by formula (XIII):

[F22]



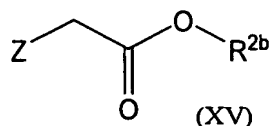
(wherein X represents a hydrogen atom or a halogen atom; Y represents a halogen atom or a lower alkoxy group; and  $R^{2b}$  represents a linear or branched lower alkyl group which may be substituted, or an aralkyl group which may be substituted, or a phenyl group), characterized by comprising reacting a compound represented by formula (XIV):

[F20]



(wherein X and Y have the same meanings as defined above)  
with a compound represented by formula (XV):

[F21]



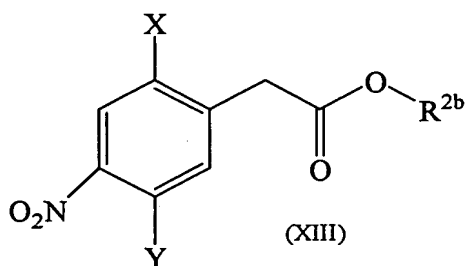
(wherein Z represents a halogen atom, a phenylthio group, an alkoxy group, or an amino group; and R<sup>2b</sup> has the same meaning as defined above) in a solvent in the presence of a base.

15. The process according to claim 14, wherein each of X and Y in formulas (XIII) and (XIV) represents a chlorine atom.

16. The process according to claim 15, wherein R<sup>2b</sup> in formulas (XIII) and (XV) represents a tert-butyl group.

17. A compound represented by formula (XIII):

[F23]



(wherein X represents a hydrogen atom or a halogen atom; Y represents a halogen atom or a lower alkoxy group; and R<sup>2b</sup> represents a linear or branched lower alkyl group which may be substituted, an aralkyl group which may be substituted, or

a phenyl group), a salt thereof, or a solvate of the compound or the salt.

18. The compound according to claim 17, a salt thereof, or a solvate of the compound or the salt, wherein each of X and Y in formula (XIII) represents a chlorine atom.

19. The compound according to claim 18, a salt thereof, or a solvate of the compound or the salt, wherein R<sup>2b</sup> in formula (XIII) represents a tert-butyl group.

20. The process according to any one of claims 1 to 7, wherein the compound represented by formula (II) is a compound produced through reduction of the nitro group of the compound represented by formula (XIII) produced through the process according to claim 14, a salt thereof, or the solvate of the compound or the salt.

21. The process according to claim 10 or 12, wherein the compound represented by formula (VI) is a compound produced through reduction of the nitro group of the compound represented by formula (XIII) produced through the process according to claim 15 or 16, a salt thereof, or the solvate of the compound or the salt.